



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,492	11/13/2003	Michael Stuart Weaver	UDC-20201 CON	8333
27774	7590	11/15/2004	EXAMINER	
MAYER, FORTKORT & WILLIAMS, PC 251 NORTH AVENUE WEST 2ND FLOOR WESTFIELD, NJ 07090			SCHILLINGER, LAURA M	
			ART UNIT	PAPER NUMBER
			2813	

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/712,492

Applicant(s)

WEAVER, MICHAEL STUART

Examiner

Laura M Schillinger

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 and 44-55 is/are pending in the application.
- 4a) Of the above claim(s) 1-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/13/03</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

This application contains claims directed to the following patentably distinct species of the claimed invention:

Species 1, claims 1-8, pertaining to a organic optoelectronic device with a first and second barrier region with an device interposed in-between;

Species 2, claims 9-32, pertaining to an OLED interposed between a first and second barrier layer;

Species 3, claims 44-55, pertaining to an organic optoelectronic device disposed over a substrate.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there is no generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with David Bonham on 11/04/04 a provisional election was made with traverse to prosecute the invention of Species 3, claims 44-55. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-32 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 44-55 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Silvernail('351).

In reference to claim 44, Silvernail teaches a device comprising:

- A substrate (Col.1, lines: 35-40);
- An organic optoelectronic device (OOD) over the substrate, the OOD selected from a OLED, an OED, an OPD and an OTFT (Col.1, lines: 25-35); and
- A barrier region disposed over the OOD, the barrier region comprising a plurality of cooperative barrier layers, the plurality of cooperative barrier layers further comprising a

Art Unit: 2813

planarizing layer and a high-density layer , wherein the high-density layer is disposed over the planarizing layer in a manner such that the high-density layer extends to the substrate layer and, in conjunction with the substrate layer, completely surrounds the planarizing layer (Fig.6).

In reference to claim 45, Silvernail teaches wherein the plurality of cooperative barrier layers comprises two or more planarizing layers and two or more high-density layers and wherein each overlying cooperative barrier layer that is disposed over one or more underlying cooperative barrier layers extends to the substrate in a manner such that the one or more underlying cooperative barrier layers are surrounded by the substrate and each overlying cooperative barrier layer (Fig.6).

In reference to claim 46, Silvernail teaches wherein the cooperative barrier layers comprise an alternating series of two or more planarizing layers and two or more high-density layers (Fig.6).

In reference to claim 47, Silvernail teaches wherein the alternating series comprises 3 to 7 planarizing layers and 3 to 7 high density layers (Fig.6).

In reference to claim 48, Silvernail teaches wherein the planarizing layer comprises a material selected from fluorinated polymers, parylenes, cyclotenes and polyacrylates (Col.2, lines: 50-60).

Art Unit: 2813

In reference to claim 49, Silvernail teaches wherein the high-density layer comprises a material selected from metal oxides, metal nitrides, metal carbides, metals and metal oxynitrides (Col.5, lines: 30-45).

In reference to claim 50, Silvernail teaches wherein the high density layer comprises a material selected from SiO, SiN, AlO, ITO, ZITO. (Col.5, lines: 35-45)

In reference to claim 51, Silvernail teaches wherein the organic optoelectronic device is an OLED device (Col.1, lines: 25-35).

In reference to claim 52, Silvernail teaches wherein the substrate is rigid (Col.1, lines: 25-35).

In reference to claim 53, Silvernail teaches wherein the substrate is a flexible substrate (Col.1, lines: 25-35).

In reference to claim 54, Silvernail teaches wherein the substrate comprises metal foil (Col.1, lines: 25-35).

In reference to claim 55, Silvernail teaches wherein the substrate comprises a rigid glass layer (Col.1, lines: 25-35).

***Conclusion***

Art Unit: 2813

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
LMS

11/10/04